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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,378	09/27/2006	Suguru Fujita	NGB-41334	7760

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EXAMINER	
CORRIELUS, JEAN B	

ART UNIT	PAPER NUMBER
2611	

NOTIFICATION DATE	DELIVERY MODE
10/06/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/599,378	FUJITA ET AL.	
	Examiner	Art Unit	
	Jean B. Corrielus	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 August 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,5-7,12-16,18-23 and 25-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *12-16,18-23 and 30* is/are allowed.

6)☒ Claim(s) *1,5-7 and 25-29* is/are rejected.

7)☒ Claim(s) *3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 September 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the state determining circuit as recited in claim 12 and the interference detecting circuit as recited in claim 21, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1- 2, 6-7, 9-12, 16 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Walker et al US patent Application Publication No. 2005/0179585 A1.

As per claim 1, Walker et al discloses an apparatus (note for instance figs. 5-7, 12 and 14) comprising an antenna 126 (reception front end) for receiving a plurality of pulse signals as a reception signal, wherein the generating time of the second pulse is longer than the first note fig. 1A, where the second pulse 102 is generated later in time with respect to first pulse signal; a delay circuit note 220/1206/820 for generating a delay signal by giving a different delay time to at least every output signal from the reception front end (note 820); and a combiner 230/1208/830 (delay pulse composition circuit) for combining a first delay signal with the output signal from the reception front end note fig. 7 and fig. 14. Note that because there no structural difference between the invention as claimed and the prior art (**Note MPEP 2114**), it is the examiner position that the prior art structure **is capable of** providing a delay time to the reception front-end output signal by the delay circuit that is longer than the pulse sequence generating time

of the first pulse signal, and is shorter than the pulse sequence generating time of the second pulse signal.

As per claim 6, Walker et al teaches a distribution circuit 128 (fig. 3 and fig. 6) for distributing the second pulse signal from the reception front end output signal output from the antenna (reception front end) and outputting the reception front end output signal and the distributed second pulse signal wherein the reception front-end output signal is output to the delay pulse composition circuit, and the distributed second pulse signal is output to the delay circuit; and wherein the delay pulse composition circuit combines the reception front-end output signal output from the distributing circuit with the delay signal output from the delay circuit, not fig. 7 and fig. 14).

As per claim 7, Walker teaches a coupler 604 coupled between distribution circuit 128 (fig. 3 and fig. 6) and delay circuit 220/1206/820.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 5 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al US patent Application Publication No. 2005/0179585.

As per claim 5, Walker teaches every feature of the claimed invention but does not explicitly teach that the delay time is a span ranging from "n-2/3 cycle" to "n-1/3

cycle" of the second pulse signal. However, examiner notes that setting a delay time having span ranging from "n-2/3 cycle" to "n-1/3 cycle" of the second pulse signal would have been obvious to one skill in the art as such setting would have allowed the signals to be generated consistent with designed parameters so as to meet system design requirements.

As per claims 25 and 27 it would have been obvious to one skill in the art to send the first pulse signal as a desirable signal and the second pulse as interference wave as it would have provided the receiver the necessary information to reconstruct the desirable signal with respect to the undesired one.

As per claims 26 and 28, it would have been obvious to one skill in the art to set the delay time as an odd multiple of half cycle of the second pulse and the reason to do so would have been the same as provided above with respect to claim 5.

As per claim 29, see claim 5.

Allowable Subject Matter

6. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 12-16, 18-23 and 30 are allowed.

Response to Arguments

8. Applicant's arguments filed 8/26/09 have been fully considered but they are not persuasive. It is the applicant's position that the "Chinese office action" is not prior art reference and that the date is irrelevant. However, it noted that 37 CFR 1.98 (b) (5), reproduced as follow for ease of convenience, states that the date of publication, mailing date of the Chinese office action" is required.

> (5) Each publication listed in an information disclosure statement must be identified by publisher, author (if any), title, relevant pages of the publication, date, and place of publication.

Applicant argues that element 1105 corresponds to the claimed "state determiner circuit" and "interference detecting circuit". However, examiner notes that drawing does not show circuit 1105 as including "state determiner circuit" and "interference detecting circuit". Page 25, lines 2-5 only teaches that the demodulator "1105" determines "communication status" and detects "interference".

Applicant further argues that Walker does not teach "a pulse sequence generating time of the second pulse signal is longer than a pulse sequence generating time of the first pulse signal". However, it is noted that in the drawing fig. 1A, Walker clearly teaches that the pulses are generated with respect to both time and frequency, note the horizontal axis, which is clearly labeled as "Time". In addition, Walker made references to "Time" in various section of the specification. Note, for example, paragraph 0058, para [0060], lines 15-16, para [0161], lines 1-12.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Monday-Thursday from 9:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean B Corrielus/
Primary Examiner, Art Unit 2611